CLAIMS

1. A coiled spring battery contact for use in a battery compartment, wherein said contact is constructed and arranged such that only an battery terminal contact point contacts an abutting a terminal of a battery installed in the battery compartment, wherein said contact point is defined by a minimal surface area of an upper end turn of the contact.

2. The coiled spring contact of claim 1, wherein said coiled spring contact comprises a lower end turn, said upper end turn, and a plurality of concentric windings disposed therebetween, wherein said upper end turn is configured to form said terminal contact point.

3. The coiled spring contact of claim 1, wherein said battery terminal contact point is one of a plurality of battery terminal contact points formed on said upper end turn of said coiled spring contact.

4. The coiled spring contact of claim 1, wherein said upper end turn terminates at a distal end configured to have a lead attached thereto.

5. The coiled spring contact of claim 2, wherein said plurality of windings have varying diameters.

6. The coiled spring contact of claim 5, wherein said diameters are larger toward said lower end turn and smaller toward said upper end turn.

7. The coiled spring contact of claim 1, wherein said upper end turn has formed therein a hairpin turn the apex of which forms said terminal contact point.

8. The coiled spring contact of claim 2, wherein said coiled spring contact has an axis

of rotation defined by said windings, and wherein said terminal contact point is laterally offset from said axis in a first direction.

9. The coiled spring contact of claim 8, wherein said lateral offset causes regions of said windings in said first lateral direction to compress more that other regions of said windings when subject to a compression force applied by an installed battery to cause said terminal contact point to shift further in said first lateral direction.

10. A coiled spring contact for use in a battery compartment to contact a terminal of a battery installed in the battery compartment, wherein said coiled spring contact is constructed and arranged with an upper end turn configured such that a minimum surface area of said upper end turn contacts the installed battery.

11. The coiled spring contact of claim 10, wherein said minimum surface area of said upper end turn defines a terminal contact point, wherein said coiled spring contact comprises a plurality of concentric windings contiguous with said upper end turn, wherein said windings define an axis of rotation and wherein said battery terminal contact point is laterally offset from said axis of rotation.

12. The coiled spring contact of claim 11, with said coiled spring contact further comprises a lower end turn contiguous with said windings and said upper end turn, wherein said lower end turn is configured to be attached to said battery compartment.

13. The coiled spring contact of claim 11, wherein said windings of said coiled spring contact have a diameter such that said coiled spring contact has a conical shape..

14. The coiled spring contact of claim 11, wherein said upper end turn has formed therein a hairpin turn oriented such that an apex of said hairpin turn forms said terminal contact point.

15. The coiled spring contact of claim 11, wherein said upper end turn has a minimal radius of curvature and is formed with a bend forming an apex facing into the battery compartment, wherein said apex forms said terminal contact point.

16. The coiled spring contact of claim 11, wherein regions of said windings in said lateral direction compress more that other regions of said windings when said coiled spring contact is subjected to a compression force applied by an installed battery to cause said terminal contact point to shift an additional distance in approximately said lateral direction, thereby scraping any insulating contaminant layer disposed on the battery terminal

17. The coiled spring contact of claim 11, wherein said battery terminal contact point is one of a plurality of eccentric battery terminal contact points formed on said upper end turn of said coiled spring contact.

18. The coiled spring contact of claim 10, wherein said upper end turn terminates at a distal end configured to have an electrical lead attached thereto.

19. A battery compartment comprising:

a housing configured to receive one or more batteries; and

a coiled spring contact having a lower end turn secured to an interior of the housing, an upper end turn for contacting a terminal of an installed battery, and a plurality of concentric windings disposed between said upper and lower end turns, with said upper end turn forming a forward-most eccentric terminal contact point to contact a terminal of a battery installed in the housing.